

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed on August 19, 2008, and the Examiner Interview held on November 6, 2008. This Reply encompasses a bona fide attempt to overcome the rejections raised by the Examiner and presents amendments as well as reasons why Applicant believes that the claimed invention, as amended, is novel and nonobvious over the applied prior art. Accordingly, Applicant respectfully requests reconsideration and favorable action in this case.

Interview Summary

Pursuant to Applicant Initiated Interview Request submitted on November 3, 2008, a telephonic interview was conducted on November 6, 2008 between Examiner Dung Chau, SPE Kavita Padmanabhan and Agent Kevin Gust. During the interview, differences between embodiments as claimed and the cited references were discussed. Applicant appreciates the time and effort taken by Examiners Chau and Padmanabhan to review Applicant's present application and discuss the pending claims and the cited prior art.

Claim Status

Claims 1-25 were pending and rejected. Claims 1 and 14 are amended herein. No claims are cancelled or newly added herein. Support for the amendments presented herein can be found in the specification as originally filed. See e.g., Specification, paras. 30, 31, 38, 40, 41, 45, 46, 50, 61 and 69, and Figures 8 and 10-13 . No new matter is introduced. By this Amendment, claims 1-25 are pending.

Rejections under 35 U.S.C. § 102

Claims 1-25 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2007/0192415 ("Pak"). The rejection is respectfully traversed. Claim 14 contains similar language as Claim 1. Accordingly, the rejection is addressed collectively as it pertains to claim 1.

Claim 1, as amended, recites:

A computer program product for discovering relationships in an arbitrarily complex environment, comprising a computer program stored on a computer readable storage medium, wherein said computer program comprises instructions executable by a processor to:

represent a first entity in a system being modeled with a first component of a first type of component in a data model, wherein the first component has a set of fields which contain information relating to the first entity, wherein at least one field in the set of fields contains information about the type of component, and wherein the first entity is a logical or physical entity in the arbitrarily complex environment;

represent a second entity in the system being modeled with a second component of a second type of component in the data model, wherein the second component has a set of fields which contain information relating to the second entity, wherein at least one field in the set of fields contains information about the type of component, and wherein the second entity is a logical or physical entity in the arbitrarily complex environment;

establish, maintain, delete and update one or more relationship discovery rules for analyzing one or more of information contained in one or more fields in the first component and information contained in one or more fields in the second component, one or more of data values associated with the first component and data values associated with the second component, and one or more references to a relationship discovery rule;

select a relationship discovery rule from the set of relationship discovery rules based on the type of component associated with the first component;

associate the selected relationship discovery rule with the first component;

apply the selected relationship discovery rule to the second component;

establish a relationship between the first component and the second component according to the relationship discovery rule, wherein the relationship represents an association between the first entity and the second entity in the system, and wherein each relationship contains a set of fields which contain information pertinent to the association, wherein one field of the set of fields contains information about the type of relationship; and

repeat one or more of selecting a relationship discovery rule from the set of relationship discovery rules, associating the selected relationship discovery rule with a first component, applying the selected relationship discovery rule with the second component to establish, delete or update a relationship when changes are made to the data model.

Thus, embodiments of a computer program product for discovering relationships in an arbitrarily complex environment may represent a first entity of the environment with a first component and may represent a second entity with a second component. Each component may be of a type of component, wherein each component has a set of fields and at least one field contains information about the type of component. The computer program product may establish, maintain, delete and update one or more relationship discovery rules, select a relationship discovery rule based on the type of component of the first component, associate the relationship discovery rule with the first component, apply the relationship discovery rule to the second component, and establish a relationship between the first component and the second component according to the relationship discovery rule. The computer program product may repeat the steps when changes are made to the data model.

In contrast, Pak describes an extensible interface for inter-module communication. During operation, customers may submit requests to a client/server system using a communication channel. The client/server system assigns, routes and queues work from multiple channels of communication to an agent skilled to respond. (See, Pak, para. 75.) A communication server may include a session mode communication server to communicate with different media types. (See, Pak, para. 84.) The communication server may communicate with third-party vendors, and a communication API may provide an interface for third party vendors. (See, Pak, pg. 7 paras 83-84.)

Applicant respectfully submits that the operation of the session mode communication server described by Pak does not include representing an entity in an arbitrarily complex environment with a component having a set of fields, wherein at least one field includes information about the type of component, as recited in claim 1. Instead, Pak teaches that the session mode communications server only maintains knowledge of clients to which it is connected to forward a request to an appropriate server component (See, Pak, para. 90).

Furthermore, Applicant submits that that the tables representing data in the Universal Queuing definition tables, the Route definition tables, and the Route Skill Map are generally defined by a user and not subject to change (See, Pak, paras. 428-9). Applicant notes that one of the advantages of embodiments disclosed by Applicant is

the ability to establish relationships when there are changes to the environment being modeled.

Also in the rejection, the Examiner states that Pak teaches maintaining a set of discovery rules. Applicant respectfully submits that Pak describes configuring commands to cause a module receiving the command to perform an operation, but fails to describe using commands to analyze fields in a first and second component, as recited in claim 1. In contrast, Applicant discloses embodiments which establish, maintain, delete and update one or more relationship discovery rules for analyzing one or more of information contained in one or more fields in the first component and information contained in one or more fields in the second component, one or more of data values associated with the first component and data values associated with the second component, and one or more references to a relationship discovery rule. (See, specification, para. 40).

Also in the rejection, the Examiner states that Pak teaches associating a relationship discovery rule with a first component and applying the relationship discovery rule to the second component. Pak does not teach representing entities with components, which allows changes made to the environment to be reflected in the relationships. Instead, Pak teaches that each driver object is designated for a different server and includes resources (i.e., service objects) that are created for a middleware server with which the driver object is associated. (See, Pak, para. 143). Thus, there does not appear to be any relationship to discover between Pak's driver objects.

Also in the rejection, the Examiner states that Pak teaches establishing a relationship between the first component and the second component according to the relationship discovery rule. Pak teaches uploading rules, such as agent rules and work item escalation rules, during the start-up of a communication server. (See, Pak, para. 297). Applicant respectfully submits that the uploading of rules does not equate to establishing a relationship based on the analysis of the two components by a relationship discovery rule, as recited in amended Claim 1.

For at least the foregoing reasons, Instead, Applicant respectfully submits that claims 1 and 14 and correspondingly the dependent claims recite subject matter not described by Pak under 35 U.S.C. § 102(b) and therefore should be allowed. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-25. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Ari G. Akmal
Reg. No. 51,388

Date: 11-19-2008
1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088